

# Claims

[c1] What is claimed is:

1. An electrical apparatus for interconnecting a first power terminal to a second power terminal comprising: first and second spaced apart conductive bases; each of said bases carrying at one end a respective vertical conductive stud portion; said first base being connected to a first power terminal; said second base being connected to a second power terminal; and a conductive coupler mechanically and electrically connecting said first portion of said vertical conductive stud secured to said first strip to said second portion of said vertical conductive stud secured to said second strip.

[c2] 2. The connector of claim 1 wherein there is further provided an insulating insert positioned between said first base and the vertical conductive stud portion thereon and said second base and the vertical conductive stud portion thereon to maintain said bases and said stud portions in a fixed position relative to each other and at a fixed distance apart.

[c3] 3. The connector of claim 1 wherein said insulating

spacer is comprised of a "U" shaped channel having with longitudinal side flanges for maintaining the first and second base units in line with respect to each other; said channel further being with a central fin narrower than said channel and centrally and vertically positioned in said channel to maintain said stud portions a fixed distance apart and in a fixed position relative to each other and to said first and second base units.

[c4]

4. The apparatus of claim 1 wherein:

said first conductive base has a selected length having first and second ends, a selected width and a selected thickness less than said selected width;

said second conductive base has a selected length having first and second ends, a selected width and a selected thickness less than said selected width;

a first portion of a conductive stud secured to said first base at its second end;

a second portion of a conductive stud secured to said second base at its second end;

said first side of said first base being electrically connected to said first terminal; and

said first side of said second base being electrically connected to said second terminal.

[c5]

5. The apparatus of claim 4 wherein:

said first and second portions of said conductive stud

are identical and carry mating thread patterns thereon.

[c6] 6. The apparatus of claim 1 wherein:  
said apparatus comprises a burn-in oven provided with a plurality of burn-in-boards therein;  
each of said burn-in-boards having a first and a second semiconductor receiving module socket thereon;  
said first socket being coupled via to a first power carrying cable bolted to said first power terminal and to a first ground cable coupled to ground; and  
said second socket being coupled via a second power carrying cable bolted to a second terminal and to a second ground cable coupled to ground.

[c7] 7. The apparatus of claim 1 wherein;  
said connector has a vertical, threaded stud positioned thereon;  
said strip and said stud carried thereon each being transversely split into first and second sides and secured together by an insulating medium;  
the first side of said threaded split stud being affixed on the first side of said base;  
the second side of said treaded split stud being affixed on the second side of said base;  
said first side of said split base being electrically connected to said first respective power coupling contact and to said first respective power cable;

the second side of said split base being electrically connected to said second respective power coupling contact and to said second respective power cable; and a threaded coupling nut threaded on said split and re-joined stud to electrically connect said first and second respective power coupling contacts and to said first and second respective power cables.

- [c8] 8. A semiconductor testing apparatus comprising:  
a burn-in oven having a plurality of burn-in-boards therein;  
each of said burn-in-boards having a first and second module sockets thereon;  
said first socket being coupled to a first external power carrying cable coupled to a first power coupling contact and to a first ground cable coupled to ground;  
said second socket being coupled to a second external power carrying cable coupled to a second power coupling contact and to a second ground cable coupled to ground;  
a connector comprised of an first and second strips, each said strip one half a divided threaded stud positioned vertically thereon;  
the first said strip and the respective stud half carried thereon being aligned with but spaced apart with the second said strip and the respective stud half carried

thereon by an inset formed of an insulating medium; said first half of said split base being electrically connected to said first respective power coupling contact and to said first respective power cable; the second half of said split base being electrically connected to said second respective power coupling contact and to said second respective power cable; and means for coupling said first and said second strips by a threaded coupling nut threaded on said first and second stud halves to electrically connect said first and second stud halves and the respective power coupling contacts to said first and second respective power cables.

- [c9] 9. A method of forming a device for selectively connecting and disconnecting a first power terminal to second power terminal consisting of the steps of:
- selecting a first substantially flat conductive strip having a selected length and a selected width with first and second ends and a thickness less than said width;
  - forming an aperture passing through the thickness of said strip adjacent said first end and said second end;
  - securing a vertical stud having a selected diameter to the center of said strip between said apertures;
  - forming a screw thread on said vertical stud;
  - cutting said strip transversely to its length at the center of the strip to divide said strip and said stud into first

and second substantially equal portions;  
placing an insulating insert between said first and second substantially equal portions to align said first portion with said second portion and restore said stud to its selected diameter.

[c10] 10. The method of claim 9 wherein said method further includes the step of placing a conductive nut on said restored stud to electrically interconnect said insulated portions.

[c11] 11. The method of claim 10 wherein there is further provided the step of removing said conductive nut from said restored stud to electrically disconnect said insulated portions one from the other.

[c12] 12. The method of claim 11 wherein said screw thread on said vertical stud is started at a known position.